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CODE 500

Landsat 7 Processing System

Build 2 Design Review



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June 24, 1966



Agenda

- **Introduction**
- **Previous Build Accomplishments**
- **Requirements/CCRs/RIDs in Build 2**
- **Subsystem Design Deltas**
- **Documentation Plans**
- **Lessons Learned**
- **Schedule**
- **Issues/Concerns**



Build 1 Accomplishments

- **Globals** - Common DB routines, log messages, shared memory, semaphores, and time routines
- **MACS/DB** - Initial system startup; database generation
- **RDCS** - Manual wideband data capture with Mizar board
- **RDPS** - All functionality including aligning bytes, PN decode, CRC, RS-EDAC, BCH
- **MFPS** - Identify VCDUs, extract major frames, determine subintervals
- **LDTS** - Create Data Access Notification message



Requirements/CCRs/RIDs in Build 2

- **Function Allocation Per Build/Release (from Build Requirements Review)**
- **Allocation of RIDs/CCRs to Builds 2 and 3**

Function Allocation to Build/Release

Build 2/Release 1

ALIGN BANDS
BAND FILE GENERATION
BROWSE LPS JOURNAL
DAN TRANSMISSION
DDN RECEIPT
GENERATE BROWSE FILE
GENERATE CAL FILE
GENERATE PCD FILE
IDPS Process Control
LDTS COMM SUPPORT
MAIN UIF MENU
MANUAL DATA CAPTURE
MANUAL LOR
METADATA FILE GENERATION
RT MESSAGE DISPLAY
WRS SCENE IDENTIFICATION

Build 3/Release 2

ACCA
ARCHIVING
AUTOMATIC ARCHIVING
AUTOMATIC DATA CAPTURE
AUTOMATIC LOR PROCESSING
CAPTURE PROCESS CTRL
CONFIG/NON-IAS PARMS UPD
DAN TIME-OUT
DAN TRANSMISSION CONTROL
DATA RCV SMRY RPT GEN
Database Performance Tuning
DELETE CAPTURE FILES
ELECTRONIC SCHEDULE INGEST
ERROR THRESHOLDS
FTS REPORT
GENERATE BROWSE FILE
GENERATE TAPE LABEL
IAS PARAMETER INGEST
LPS DB BACKUP
LPS Q/A REPORT
LPS SYSTEM STARTUP
MANAGE RDC ACCT IN DB
MANUAL ARCHIVING/RESTAGE
METADATA FILE GENERATION
MOVING WINDOW DISPLAY
OUTPUT FILE DELETE CONTROL
OUTPUT FILE DELETION
PARAMATER PROPAGATION
PLAYBACK CAPTURED DATA
(RE)SEND DANs
SUSPEND LOR ON CAPTURE
USE DB PARMS FOR LOR
WRS SCENE IDENTIFICATION

Allocation of RIDs/CCRs to Builds 2 and 3

RID/CCR	B2 Implementation	B3 design to be done in B2	B3 Implementation
RID 12	PCDS		
RID 13	MACS/DB		
RID 17	MACS/DB		
RID 21	PCDS		
RID 22	PCDS		
RID 23	IDPS		
RID 24			MACS/DB
RID 25		MACS/DB	MACS/DB
RID 26			IDPS
RID 32		MACS/DB	MACS/DB
RID 33		PCDS	PCDS/IDPS
RID 34		MACS/DB	MACS/DB
RID 41		MACS/DB	MACS/DB
RID 42			MACS/DB
RID 49			IDPS
CCR 17			MACS/DB
CCR 21	MACS/DB		
CCR 30	MACS/DB		
CCR 32		IDPS	IDPS
CCR 33	MACS/DB	MFPS	
CCR 38	MACS/DB		
CCR 52	MACS/DB		
CCR 63		MACS/DB	
CCR 64			MACS/DB



Subsystem Design Changes for Build 2

- **Globals** - none
- **MACS/DB**
- **RDCS** - none, but will prototype HPDI board capture software
- **MFPS** - TBD
- **PCDS**
- **IDPS**
- **LDTs** - none



Major Frame Processing Subsystem Design Options

- Perform major redesign of subsystem
 - Aesthetically pleasing, but costly
 - Redesign est. 6 - 8 units
 - Not ideal, but workable
 - Approx. 2 months design plus implementation
 - Cannot be completed for Build 2
- Use integration team patch for system testing and Release 1 delivery
 - Workable solution (see next slide)



Subsystem I&T Fix

- **What it is**
 - Always use received value for minor frame counter
- **Consequences**
 - Errors not caught by RDPS are propagated. No additional correction to anomalous counter values
 - All other functionality is testable

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Payload Correction Data Subsystem (PCDS)

Minnie Wong



Introduction

- Receive PCD data words from MFPS
- Build PCD minor frames, PCD major frames, PCD cycles
- Identify scene information according to WRS
- Report scene information to IDPS and database
- Create HDF format PCD files on subinterval bases
- Create PCD trouble file



Build 2 Build Requirements

- **Build Requirements**
 - Determine PCD info word, extract info word, and determine majority-voted info word
 - Build PCD minor frames, PCD major frames, and PCD cycles
 - Compute latitude and longitude
 - Determine WRS scene coordinates
 - Calculate scene information
 - Report scene information
 - Create PCD file

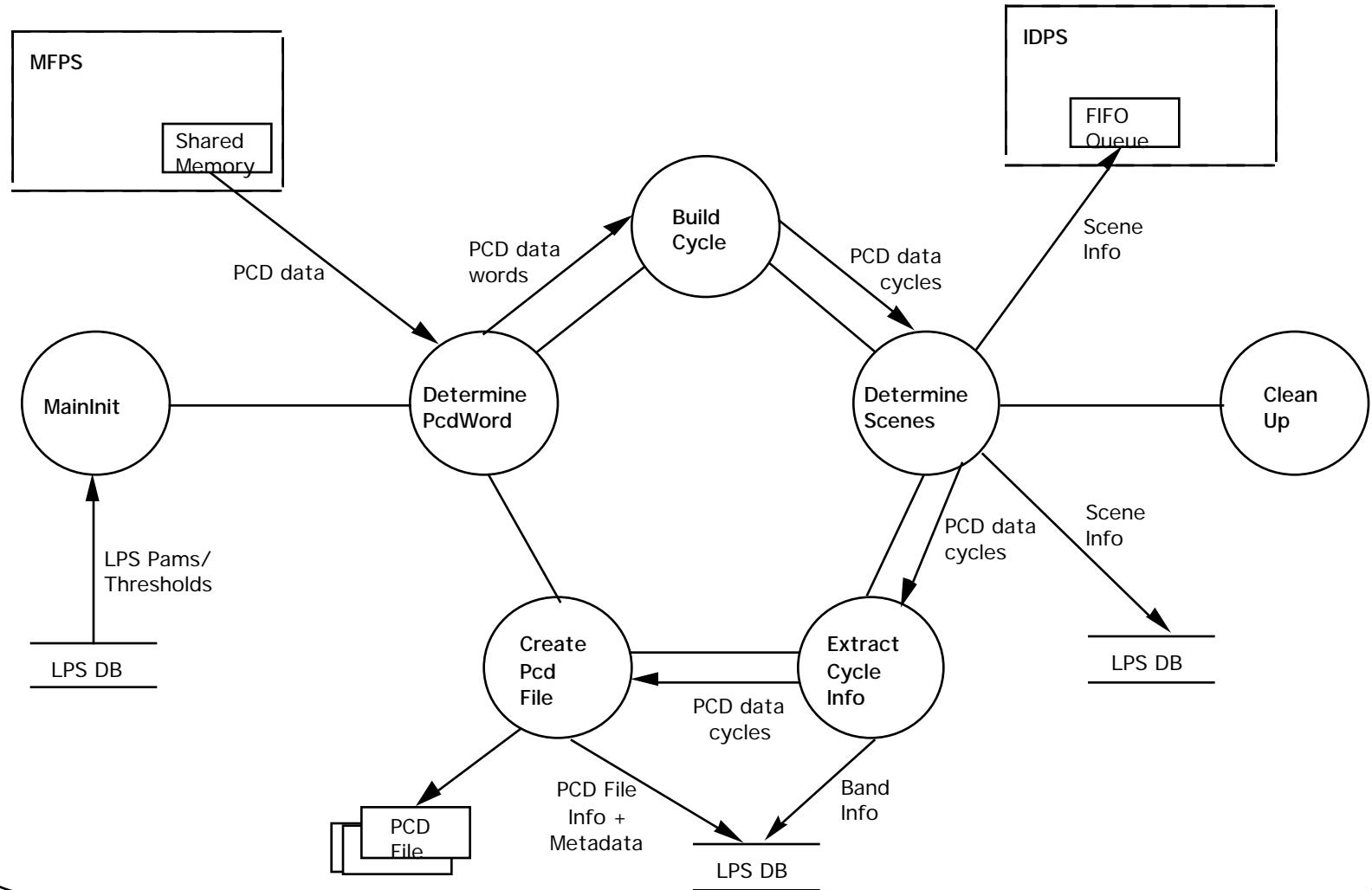


Design Changes

- Delete orbit number calculation (RID 12)
- Perform the hybrid algorithm of majority voting on PCD data words (RID 20)
- Use data points from the previous and following PCD cycles to interpolate missing points in the current cycle list
- Compute actual scene corners (RID 21)
- Convert Angular Displacement Sensor (ADS), ADS Temperature, Gyro Data, Gyro Drift Data to engineering units in PCD file (RID 22)

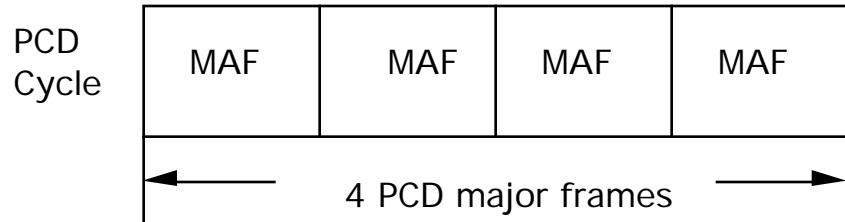
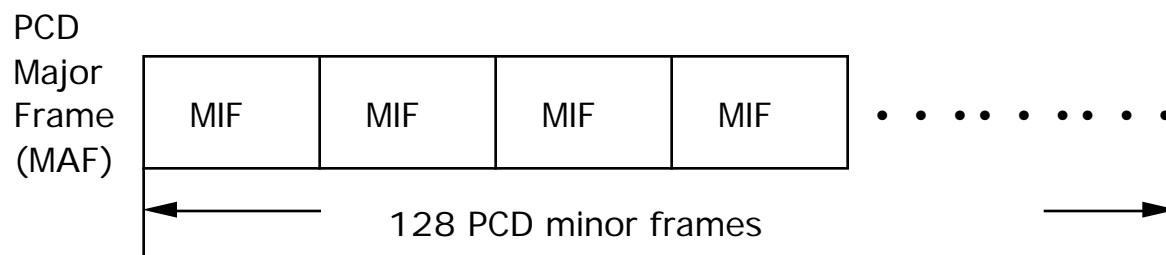
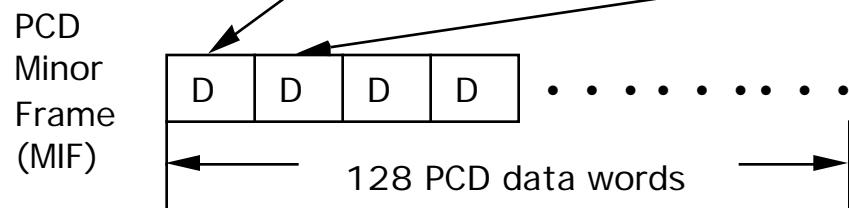
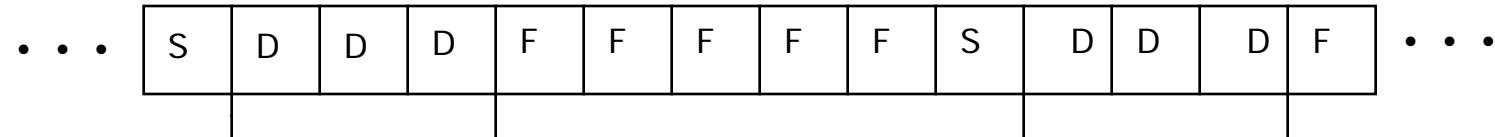


PCDS Control Flow



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Scene Determination

- Extract the ephemeris, attitude, calibration door activity status, and the spacecraft time (UTC) from each PCD cycle
- Interpolate the missing ephemeris and attitude data
- Compute the ephemeris and attitude time from the spacecraft time
- Compute the latitude and longitude of the view point
- Retrieve the WRS scene center from the database
- Interpolate the actual scene center from the latitude and longitude of the view points
- Compute scene corners
- Report the scene description to the IDPS and the database



Issues/Concerns

- **Time Coefficient file**
 - No UTC to UT1 time correction for Greenwich Hour Angle Computation
 - Longitude accuracy is in question

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LPS Build 2 Design Review

Image Data Processing Subsystem

(IDPS)

Mike Reid



Reasons for B2 Design Changes

- Several changes have been made to IDPS since the detailed design was originally done in the Fall of 1995:
 - Band files must now be written in the HDF-EOS “swath” format using the HDF-EOS library.
 - It was discovered that HDF files could not be read from and written to simultaneously; therefore, the Band Files could not be used to buffer scene data from Band to the other concurrent processes.
 - Synchronization problem with PCDS.
 - Interfaces with MFPS and PCDS are now better defined.
 - Improved IDP design by eliminating global data.

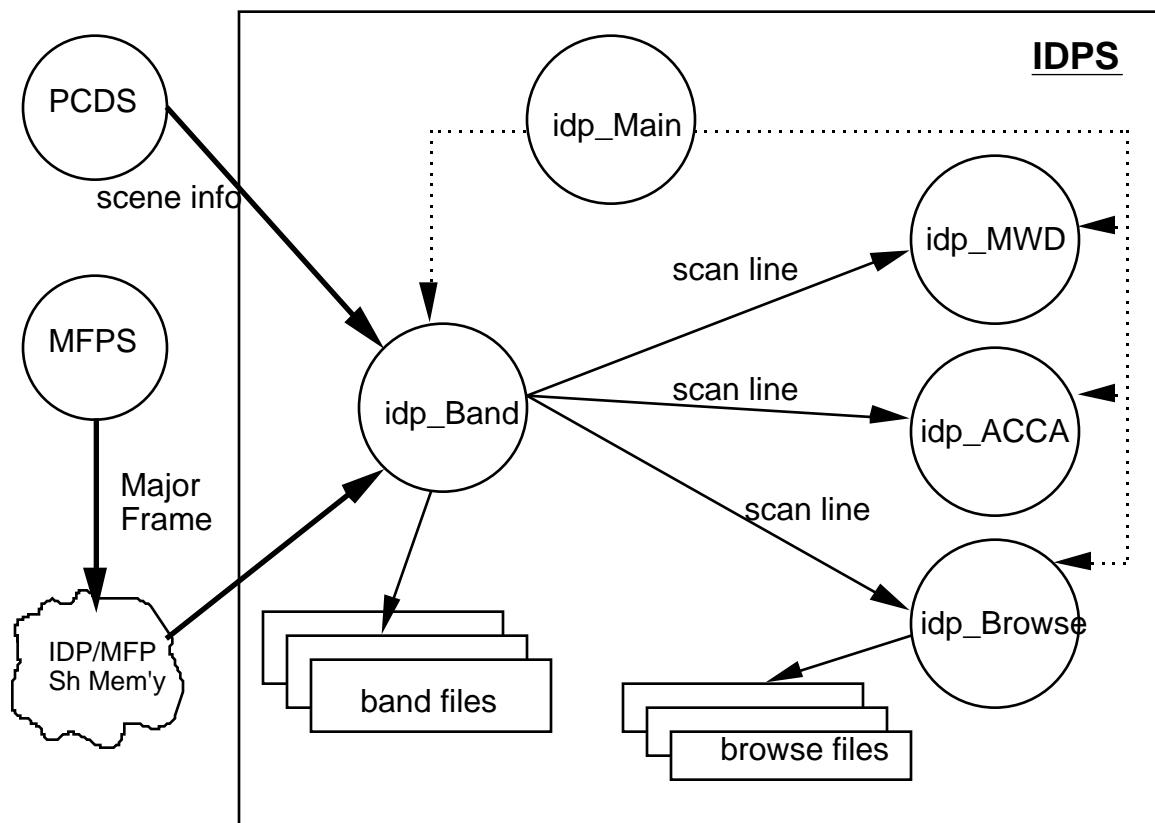


IDPS Dataflow

- The Band process reads major frames from shared memory and deinterleaves them.
- Band deinterleaves the major frames by band, organizes them by full scenes, and writes them to *band files* in HDF format.
- ACCA, Browse, and Moving Window Display (MWD) take the scenes as input.
- Browse and MWD now process image data one scan line at a time.
- ACCA performs statistical analysis on the entire scene.



IDPS Dataflow and Interfaces





Design Issues

- Two issues with the existing IDPS design have surfaced during Build 2 implementation.
 - Scene Buffering
 - IDPS Synchronization with MFPS and PCDS
- The following slides examine each of these issues and present options for their resolution.



IDPS Scene Buffering Problem

- Original design called for ACCA, Browse, and MWD to read scene data from band files created by the Band process.
- The Band files must be written in HDF format using the HDF/EOS library.
- HDF files cannot be written to and read from concurrently.
- Buffering by file would likely be too slow.
- A design change is required.



Design Options Considered

- Write the Band data to a temporary UNIX scratch file on a scene by scene basis.
- Buffer the scene data in a shared memory segment.
- Use an IRIX arena.
- Store the scene data in the database.
- Use multiple threaded processing (SPROC).
- Modify the ACCA algorithm to accept data one scanline at a time.



Option: UNIX Scratch File

- A full scene of data would be written by Band to a scratch file and then read by the other processes which would delete it when the last one was finished reading.
- Advantages
 - Easy to implement
 - Low risk
 - Adequate storage space on disk
- Disadvantage
 - File I/O is very slow, might not meet performance requirements



Option: Shared Memory

- A new shared memory segment could be allocated to IDPS for use in buffering scene data.
- Would require two buffers, one for Band to write to and one for the other processes to read from.
- Advantages
 - Reads from shared memory are fast
 - Low risk
- Disadvantages
 - Would require a major memory upgrade on the machines
 - Each buffer would require ~212Mb, there is currently only 512Mb available on the machines



Option: IRIX Arena

- An arena is a shared memory solution which is provided by SGI with IRIX for interprocess communication
- The arena provides an easy interface for sharing variables between processes
- Advantages
 - IRIX takes care of all the data contention issues
 - Arenas are fast
- Disadvantages
 - Same problems as other shared memory option
 - SGI specific, not portable
 - Never prototyped by LPS group, risky



Option: Use the Database

- Use the Oracle database to store a full scene of data. Band will insert scan lines into the DB, ACCA, Browse, and MWD will query them
- Advantages
 - Oracle handles all data contention issues
 - Oracle caches data, thus greatly improving performance
 - Easy to implement
 - Low risk
 - Oracle is already licenced and available on LPS
- Disadvantages
 - Faster than a scratch file, but probably not fast enough
 - Requires changing the schema of the LPS DB or creating a new DB just for IDPS



Option: Multiple Threads

- IRIX provides a means of running multiple concurrent processes in the same address space (**SPROC**)
- Band could update a data structure containing the scan lines and the other processes could access it
- Advantages
 - Fast
- Disadvantages
 - Inadequate memory on the system
 - Never prototyped by LPS, risky, unknown issues
 - SGI specific, not portable
 - Would require a major redesign of IDPS



Option: Modify ACCA

- The ACCA algorithm can be implemented such that only Band 6 data must be stored in an entire scene. The data for the other five bands can be processed one scan line at a time
- The ACCA design (Build 3) would be modified to buffer Band 6 data internally and to receive the other bands one scanline at a time
- A new module (`idp_sceneIO`) will be created to handle the interprocess communication and buffer smaller amounts of data



Option: Modify ACCA (Cont'd)

- Advantages
 - Only Band 6 data needs to be buffered as a full scene, therefore a major memory upgrade will not be required
 - Only a few scan lines at a time need be buffered for the other bands requiring much less memory
 - Fast, since there is no disk I/O
 - Only modest impact to the existing design
- Disadvantages
 - Requires modification of the `idp_ACCA` design
 - Requires creation of a new module, `idp_sceneIO`
 - Band must wait for the slowest process to clear out its buffer before it can send more scene data



IDP/PCD Synchronization

- PCDS needs to process an entire scene of data before it can calculate the center time and geolocation data for the scene.
- PCDS sends this information to IDPS.
- IDPS must be able to process major frames and clear out the IDP/MFP shared memory segment quickly.
- IDPS needs to be modified so that it can start moving data from shared memory to the band files without waiting for PCD.



IDP/PCD Synchronization (Cont'd)

- MFPS would stall while waiting for IDPS to clear out the shared memory buffer.
- PCDS would then stall on the next scene while waiting for MFPS to give it more data.
- IDPS would then stall on the next scene while waiting for the stalled PCDS.
- The whole LPS system could deadlock!



Options

- Buy more memory for the machines
 - Advantage: No change to existing design.
 - Disadvantage: \$\$\$
- Maintain multiple band files simultaneously.
 - Advantage: Robust solution
 - Disadvantage: Major redesign of idp_Band module
- Move scene info processing to the end of the subinterval.
 - Advantage: Only a small design change.
 - Disadvantages:
 - » IDP might have to wait a short time for the PCDS message before processing the next subinterval
 - » Creates problem buffering data for ACCA, Browse, and MWD in Build 3



Options (Con't)

- **Read the Raw Data Capture File twice**
 - MFPS would read a full scene's worth of data and place it in PCDS' shared memory.
 - After PCDS has generated the scene info, MFPS would then re-read the file from the beginning and place the data in IDPS' shared memory.
 - IDPS would then run one full scene behind PCDS.
- **Advantages**
 - Eliminates IDPS/PCDS synchronization problem
 - Eliminates buffering problem
- **Disadvantages**
 - Requires two separate reads of the same data from the RDC file, extra file I/O, slows down processing
 - Requires a design change to MFPS and PCDS



Browse and ACCA Problem

- Aforementioned solutions are OK for build 2, but create a problem in Build 3:
 - Browse and ACCA operate on a scene by scene basis.
 - If the geolocation information is not available until PCD has processed a full scene, Browse and ACCA have to wait before they can even start.
 - But they cannot wait because they have no where to buffer the data from Band.
 - The scene buffering problem is simply postponed until build 3, not solved!



Recommended Solutions

- IDPS is modified to move major frames from MFPS/IDPS shared memory to band files immediately, but add geolocation info to swath afterwards, when it will be available from PCDS.
- Browse and ACCA will not be started until Band has created, filled, and closed the band files.
- Browse and ACCA will read the scene data from the completed band files.
- Advantages
 - Requires only a modest change to the design.
 - Does not require extra memory.
 - Solves the buffering and synchronization problems.



Recommended Solutions (Con't)

- **Advantages (Cont'd)**
 - Saves storage space on system.
 - Easy to implement.
 - Simplifies Browse and ACCA designs, they can take advantage of the HDF data referencing functions.
 - Low risk.
- **Disadvantages**
 - Browse and ACCA must wait for Band to finish with the subinterval before they can start, affects daily LPS processing time.
 - ETE throughput would be especially affected in cases where there is only one subinterval in the contact period.



Build 2 Objectives

- Implement idp_Main and idp_Band
- Be able to generate full LPS Band Files
- Modify idp_ACCA design
 - Refer to earlier slides
- Modify idp_Browse design
 - Include contrast stretching and scene buffering

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Documentation Updates

- Software Requirements Specification



New Documentation

- **Release 1 User's Guide**
 - Generated by System Engineering Personnel
- **Release 1 Programmer's Reference Manual**
 - As-developed design
 - Structure charts generated via reverse engineering tool (tool TBD)



Build 1 Lessons Learned

- Establish infrastructure before implementation
- Provide training to developers
- Excessively detailed PDL of questionable value
- Minimize paperwork and the number of platforms developers must use to do their work
- Require common code to be bulletproof
- Provide efficient network environment
- Provide dedicated, onsite contractor management



Establish Infrastructure Before Implementation

- **Development environment**
 - Provide development computer(s) with ample resources
 - Define directory structures for subsystems and developers
 - Define common/consistent initialization files (.cshrc, etc.)



Establish Infrastructure Before Implementation (Cont'd)

- Configuration Management
 - Identify and test CM tool
 - Set up CM procedures
 - Establish CM library
- Software Standards & Procedures
 - Workable
 - Minimize silliness within project constraints



Provide Training to Developers

- Configuration tool and procedures
- Software Standards & Procedures
- Development tools (editor, debugger, etc.)
- Cross-train developers to minimize impact of attrition



Minimize Paperwork, Etc.

- Build 1
 - S/W Engineering Notebooks (SENs) on Macs
 - Unit status in Oracle DB on development platform
- Build 2
 - SENs and unit status merged in Oracle DB on development platform
 - Unit and subsystem test plans still on Macs
- Build 3
 - Unit and subsystem test plans on development platform? -- open to suggestions

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Detailed Build Schedule

- Status DB Reports

07/05/96

L P S I n s p e c t i o n R e p o r t

PAGE: 1

Insp ID	Insp Type	Chief Insp	Num Planned Insp	Planned Date	Actual Date	Prep Time	Meeting Length
IDP221 C	IW		2	05/24/96	05/24/96	3.00	3.00
IDP237 D	IW		2	05/24/96	05/24/96	1.50	1.00
IDP238 C	EC		2	06/10/96	06/13/96	14.00	2.00
IDP239 D	MR		2	06/10/96	06/13/96	3.00	.50
IDP240 C	EC		1	05/31/96	05/31/96	.50	.50
LDT210 D	SH			06/28/96			
LDT211 D	CL			07/05/96			
LDT286 D	CL			06/21/96			
LDT287 D	CL			06/28/96			
LDT290 D	HK			07/05/96			
LDT291 C				06/21/96			
LDT293 D	HK			07/12/96			
LDT294 C	VT			06/28/96			
LDT295 C	CL			07/12/96			
LDT296 C	HK			07/19/96			
LDT297 C	CL			07/26/96			
LPS272 C	SH			06/28/96			
LPS288 D				08/09/96			
LPS289 C				08/26/96			
LPS292 C				07/31/96			
MAC222 C				06/03/96			
MAC241 C				07/15/96			
MAC242 C				08/05/96			
MFP211 C	RS			07/15/96			
MFP226 D	RS			07/08/96			
MFP227 C	MR			06/28/96			
MFP228 C	MR			07/10/96			
MFP229 C	MR			07/18/96			
MFP230 C	LG			07/03/96			
MFP231 C	LG			07/12/96			
MFP232 C	LG			07/23/96			
MFP233 C	EL			06/25/96			
MFP234 C	RT			07/17/96			
MFP235 C	RT			07/24/96			
MFP236 C	HV			07/16/96			
PCD201 C	MW		1	04/16/96	04/16/96	2.50	.25
PCD225 C	MW		1	05/10/96	05/16/96	2.00	.25
PCD246 C				06/14/96			
PCD247 C				07/19/96			
PCD248 C				07/12/96			
PCD249 C	MW		1	06/28/96	06/27/96	2.00	1.50
PCD266 C				08/02/96			
PCD267 C				07/26/96			
PCD268 C				08/02/96			
PCD269 C				08/09/96			
PCD270 C				08/16/96			
PCD271 D				07/26/96			

Session altered.

LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 idp_Main.c 2 idp_MainAbort.c 2 idp_MainChildrenActive.c 2 idp_MainGlobal.h 2 idp_MainInit.c 2 idp_MainMoreSubintervals.c 2 idp_MainProcessChildSignal.c 2 idp_MainPrototypes.h 2 idp_MainShutdown.c 2 idp_constants.h 2 idp_types.h 2 lps_MF_scene.h 2 lps_major_frame.h 2 lps_scene_info.h	IDP221
2 idp_MainAbort.c 2 idp_MainChildrenActive.c 2 idp_MainGlobal.c 2 idp_MainMoreSubintervals.c	IDP237
2 idp_BandAppend.c 2 idp_BandClose.c 2 idp_BandClose.h 2 idp_BandCreFiles.c 2 idp_BandCreFiles.h 2 idp_BandDetSubIntv.c 2 idp_BandDetSubIntv.h 2 idp_BandEndOfScene.c 2 idp_BandEndOfScene.h 2 idp_BandEndPartial.c 2 idp_BandEndPartial.h 2 idp_BandExtGlobals.h 2 idp_BandFileDelete.c 2 idp_BandFileWrite.c 2 idp_BandFileWrite.h 2 idp_BandFillFile.c 2 idp_BandFillFile.h 2 idp_BandFindScanNum.c 2 idp_BandFindScanNum.h 2 idp_BandFindScene.c 2 idp_BandFindScene.h 2 idp_BandGlobals.h 2 idp_BandInit.c 2 idp_BandInit.h 2 idp_BandMain.c 2 idp_BandPrototypes.h 2 idp_BandReadMF.c 2 idp_BandReadMF.h 2 idp_BandSceneTimes.c 2 idp_BandSceneTimes.h 2 idp_BandStartPartial.c 2 idp_BandStartPartial.h 2 idp_BandState.h 2 idp_BandStatusInfo.c 2 idp_BandStatusInfo.h	IDP238

LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 idp_HDFClose.c 2 idp_HDFClose.h 2 idp_HDFFill.c 2 idp_HDFFill.h 2 idp_HDFOpen.c 2 idp_HDFOpen.h 2 idp_HDFWriteGeolocation.c 2 idp_HDFWriteGeolocation.h 2 idp_HDFWriteformat1.c 2 idp_HDFWriteformat1.h	IDP238

```

2 idp_HDFWriteformat2.c
2 idp_HDFWriteformat2.h
2 idp_SceneIO.c
2 idp_constants.h
2 idp_db_BandUpdate.c
2 idp_db_BandUpdate.h

2 idp_HDFClose.c
2 idp_HDFFill.c
2 idp_HDFOpen.c
2 idp_HDFWriteGeolocation.c
2 idp_HDFWriteformat1.c
2 idp_HDFWriteformat2.c
2 idp_SceneIO.c
2 idp_db_BandUpdate.c

2 idp_ACCAParms.h
2 idp_BandParms.h
2 idp_BrowseParms.h
2 idp_MWDParms.h
2 idp_MainAbort.h
2 idp_MainChildrenActive.h
2 idp_MainGlobal.c
2 idp_MainInit.h
2 idp_MainMoreSubintervals.h
2 idp_MainProcessChildSignal.h
2 idp_MainShutdown.h

2 ldt_db_GetServerInfo
2 ldt_start_client_n_clock

2 ldt_ddnVerifyLongDDN
2 ldt_ddnVerifyShortDDN

2 ldt_danProcessLongDAA
2 ldt_danProcessShortDAA
2 ldt_danRcvDAA

2 ldt_RcvDDN
2 ldt_SendDAN
2 ldt_ddnGenDDA
2 ldt_ddnProcTermSig
2 ldt_ddnProcessDDN
2 ldt_ddnSendDDA
2 ldt_start_client_n_clock

```

LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 ldt_db_CreateDANInfo	LDT290
2 ldt_db_CreateFileInfo	
2 ldt_db_CreateFileSetInfo	
2 ldt_db_InsFileSetInfo	
2 ldt_db_UpdateDANInfo	
2 ldt_ddnVerifyLongDDN	
2 ldt_ddnVerifyShortDDN	
2 ldt_db_GetDANInfo	LDT293
2 ldt_db_GetFileInfo	
2 ldt_db_GetLDTParm	
2 ldt_db_UpdateDANInfo	
2 ldt_db_UpdateFileInfo	
2 ldt_db_UpdateFileSetInfo	
2 ldt_Broadcast	LDT294
2 ldt_CreateServer	
2 ldt_GetCurrentEDCTime	
2 ldt_ReadSocket	
2 ldt_SetSockOpts	
2 ldt_SocketResponse	
2 ldt_TimeDiff	
2 ldt_UnpackHeader	
2 ldt_WriteSocket	
2 ldt_ddnGenDDA	
2 ldt_ddnVerifyOriginator	

```

2 ldt_create_client                                LDT295
2 ldt_danProcessLongDAA
2 ldt_danProcessShortDAA
2 ldt_danRcvDAA
2 ldt_db_GetServerInfo
2 ldt_establish_client
2 ldt_start_client_n_clock

2 ldt_db_CreateDANInfo                           LDT296
2 ldt_db_CreateFileGroupInfo
2 ldt_db_CreateFileSetInfo
2 ldt_db_GetDANInfo
2 ldt_db_GetFileGroupInfo
2 ldt_db_GetLDTParm
2 ldt_db_InsFileSetInfo
2 ldt_db_UpdateDANInfo

2 ldt_db_UpdateFileGroupInfo                     LDT297
2 ldt_db_UpdateFileInfo
2 ldt_db_UpdateFileSetInfo
2 ldt_ddnProcTermSig
2 ldt_ddnProcessDDN
2 ldt_ddnSendDDA
2 ldt_ddnVerifyLongDDN
2 ldt_ddnVerifyShortDDN

```

LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 lps_FIFOClose	LPS272
2 lps_FIFOOpen	
2 lps_FIFOReceive	
2 lps_FIFOSend	
2 lps_IPC.h	
2 lps_RsrcAlloc	
2 lps_RsrcAllocFIFO	
2 lps_RsrcDealloc	
2 lps_constants.h	
2 lps_ShmAddListTail.c	LPS288
2 lps_ShmAddrtoBlock.c	
2 lps_ShmBlocktoAddr.c	
2 lps_ShmCreate.c	
2 lps_ShmOpen.c	
2 lps_ShmRemListHead.c	
2 lps_ShmRemListTail.c	
2 lps_ShmAddListTail.c	LPS289
2 lps_ShmAddrtoBlock.c	
2 lps_ShmBlocktoAddr.c	
2 lps_ShmCreate.c	
2 lps_ShmOpen.c	
2 lps_ShmRemListHead.c	
2 lps_ShmRemListTail.c	
2 lps_db_GetSubIntvInfo	LPS292
2 mac_ExamLPSJournal.c	MAC241
2 mac_FilterMsg.c	
2 mac_OpsMsg.c	
2 mac_ui_MainMenu	
2 mac_ui_MainShutdown	
2 mac_ui_OpsMsg	
2 mac_ui_StartCapture	
2 mac_ui_StartLOR	
2 mac_ui_StartStopDDNServer	
2 mac_ui_StopCapture	
2 mac_ui_StopLOR	
2 mac_MetaDataGen.c	MAC242
2 mac_MetaDataGenFileHeadDesc.c	
2 mac_MetaDataGenScene.c	
2 mac_MetaDataGenSubIntv.c	
2 mac_MetaDataWriteAScene.c	
2 mac_MetaDataWriteSubIntv.c	

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2 mac_db_MetaDataGetAScene.pc
2 mac_db_MetaDataGetBandsPresent.pc
2 mac_db_MetaDataGetSubIntv.pc

2 mfp_MainQASubGen.c                                MFP211
2 mfp_MainQASubGen.c                                MFP226
2 mfp_MainQAZeroScene.c

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LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 mfp_MainPcdExtract.c	MFP227
2 mfp_MainPcdStatusProc.c	
2 mfp_MainStatusExtract.c	
2 mfp_FindMjfSync.c	MFP228
2 mfp_VerifyMjf.c	
2 mfp_Main.c	MFP229
2 mfp_Call0rExtract.c	MFP230
2 mfp_CalWriteFile.c	
2 mfp_ChckSplitMnf.c	
2 mfp_MainVerifySpacecraftId.c	
2 mfp_CondenseDataGrp.c	MFP231
2 mfp_ExtractMnf.c	
2 mfp_MainRelShmBlk.c	
2 mfp_MainInit.c	MFP232
2 mfp_AlignBands.c	MFP233
2 mfp_FillBand6.c	
2 mfp_FillMostBands.c	
2 mfp_Deint.c	MFP234
2 mfp_MainBandGen.c	
2 mfp_MainFillMissMjfs.c	
2 mfp_FindMfjEol.c	MFP235
2 mfp_compareEol.c	
2 mfp_MainCleanup.c	MFP236
2 pcd_CalDate.c	PCD201
2 pcd_ComputeEpoch.c	
2 pcd_DayOfYear.c	
2 pcd_EpochBreakdown.c	
2 pcd_JulDate.c	
2 pcd_LagrangeInt.c	
2 pcd_MainAdjustTime.c	
2 pcd_MainAttitudeInt.c	
2 pcd_MainEphemerisInt.c	
2 pcd_MonthDay.c	
2 pcd_MainComputeGHA.c	PCD225
2 pcd_MainComputeLat.c	
2 pcd_MainGetNutAng.c	
2 pcd_MainCheckDataPoints.c	PCD246
2 pcd_MainComputeLookPoint.c	
2 pcd_MainComputePosition.c	
2 pcd_Main.c	PCD247
2 pcd_MainCleanUp.c	
2 pcd_MainComputeSceneCorners.c	

LPS Build 2 Units Mapped to Inspection Id

BUILD UNIT	INSPEC
2 pcd_MainDetSceneDescription.c	PCD247
2 pcd_MainDetermineScenes.c	
2 pcd_MainExtractSceneParms.c	
2 pcd_MainInit.c	

2 pcd_MainReportScenes.c	
2 pcd_MainAcceptMinorFrames.c	PCD248
2 pcd_MainBuildCycle.c	
2 pcd_MainBuildMajorFrames.c	
2 pcd_MainBuildMinorFrames.c	
2 pcd_MainDetermineMissingWords.c	PCD249
2 pcd_MainFormatWords.c	
2 pcd_MainLocateSyncPatterns.c	
2 pcd_MainPerformMajorityVote.c	
2 pcd_db_ReportSceneInfo.pc	PCD266
2 pcd_db_StoreAcctInfo.pc	
2 pcd_db_StoreBandsPresent.pc	
2 pcd_MainCreatePcdFile.c	PCD267
2 pcd_MainUpdateSubIntv.c	
2 pcd_MainUpdateSubIntvStats.c	
2 pcd_MainWriteCycleToFile.c	
2 pcd_MainDeterminePcdWord.c	PCD268
2 pcd_MainExitHandler.c	
2 pcd_MainExtractCycleInfo.c	
2 pcd_MainExtractWords.c	
2 pcd_MainFillMultiCycles.c	
2 pcd_MainFillPcdCycle.c	
2 pcd_db_GetFirstWrssScene.pc	
2 pcd_db_GetNextWrssScene.pc	
2 pcd_MainEvalMnfQuality.c	PCD269
2 pcd_MainFillMajorFrame.c	
2 pcd_MainFormatPcdCycle.c	
2 pcd_MainExtractMjfOneWord72.c	PCD270
2 pcd_MainExtractMjfThreeWord72.c	
2 pcd_MainExtractMjfTwoWord72.c	
2 pcd_MainExtractMjfZeroWord72.c	
2 pcd_MainExtractWord72.c	
2 pcd_MainProcMajorFrame.c	
2 pcd_MainExtractMjfOneWord72.c	PCD271
2 pcd_MainExtractMjfThreeWord72.c	
2 pcd_MainExtractMjfTwoWord72.c	
2 pcd_MainExtractMjfZeroWord72.c	
2 pcd_MainExtractWord72.c	
2 pcd_MainProcMajorFrame.c	

282 rows selected.

Session altered.

LPS Build 2 Units

UNIT	DESIGN SUB CERT SYS DATE	CODE CERT DATE	UNIT TEST PLANNED	UNIT TEST ACTUAL	PGMR	DSGN
<i>idp_ACCAParms.h</i>		<i>IDP</i>	<i>06/13/96</i>		<i>MR</i>	<i>MR</i>
<i>idp_BandAppend.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandClose.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandClose.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandCreFiles.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandCreFiles.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandDetSubIntv.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandDetSubIntv.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandEndOfScene.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandEndOfScene.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandEndPartial.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandEndPartial.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandExtGlobals.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFileDelete.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFileWrite.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFileWrite.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFillFile.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFillFile.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFindScanNum.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFindScanNum.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFindScene.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandFindScene.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandGlobals.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandInit.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandInit.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandMain.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandParms.h</i>			<i>06/13/96</i>		<i>MR</i>	<i>MR</i>
<i>idp_BandPrototypes.h</i>					<i>IW</i>	
<i>idp_BandReadMF.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandReadMF.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandSceneTimes.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandSceneTimes.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandStartPartial.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandStartPartial.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandState.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandStatusInfo.c</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BandStatusInfo.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_BrowseParms.h</i>			<i>06/13/96</i>		<i>MR</i>	<i>MR</i>
<i>idp_HDFClose.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFClose.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_HDFFill.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFFill.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_HDFOpen.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFOpen.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_HDFWriteGeolocation.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFWriteGeolocation.h</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFWriteformat1.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFWriteformat1.h</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFWriteformat2.c</i>				<i>07/19/96</i>	<i>IW</i>	<i>IW</i>
<i>idp_HDFWriteformat2.h</i>				<i>07/19/96</i>	<i>IW</i>	
<i>idp_MWDParms.h</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_Main.c</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainAbort.c</i>			<i>05/31/96</i>	<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainAbort.h</i>				<i>06/13/96</i>		
<i>idp_MainChildrenActive.c</i>				<i>06/13/96</i>	<i>MR</i>	
<i>idp_MainChildrenActive.h</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainGlobal.c</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainGlobal.h</i>				<i>06/13/96</i>		
<i>idp_MainInit.c</i>				<i>06/13/96</i>		
<i>idp_MainInit.h</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainMoreSubintervals.c</i>			<i>05/31/96</i>	<i>06/13/96</i>	<i>MR</i>	
<i>idp_MainMoreSubintervals.h</i>				<i>06/13/96</i>	<i>MR</i>	<i>MR</i>
<i>idp_MainProcessChildSignal.c</i>				<i>06/13/96</i>		

LPS Build 2 Units

DESIGN SUB CERT	CODE CERT	UNIT TEST	UNIT TEST
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96/07/09
11:48:46

2

LPS_Build_2_Units

UNIT	SYS	DATE	DATE	PLANNED	ACTUAL	PGMR	DSGN
<i>idp_MainProcessChildSignal.h</i>	IDP		06/13/96			MR	MR
<i>idp_MainPrototypes.h</i>						MR	
<i>idp_MainShutdown.c</i>			06/13/96			MR	
<i>idp_MainShutdown.h</i>			06/13/96			MR	MR
<i>idp_SceneIO.c</i>						MR	
<i>idp_constants.h</i>			06/13/96			MR	
<i>idp_db_BandUpdate.c</i>				07/19/96		IW	IW
<i>idp_db_BandUpdate.h</i>						IW	
<i>idp_types.h</i>			06/13/96			MR	
<i>lps_exception.h</i>			06/20/96			MR	EC

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT	PGMR	DSGN
	SUB	CERT	CERT	TEST		
	SYS	DATE	DATE	TEST		
<i>ldt_Broadcast</i>	LDT		06/28/96			SH
<i>ldt_CreateServer</i>			06/28/96			SH
<i>ldt_GetCurrentEDCTime</i>			06/28/96			SH
<i>ldt_RcvDDN</i>			07/19/96			SH
<i>ldt_ReadSocket</i>			06/28/96			SH
<i>ldt_SendDAN</i>			07/19/96			CL
<i>ldt_SetSockOpts</i>			06/28/96			SH
<i>ldt_SocketResponse</i>			06/28/96			SH
<i>ldt_TimeDiff</i>			06/28/96			SH
<i>ldt_UnpackHeader</i>			06/28/96			SH
<i>ldt_WriteSocket</i>			06/28/96			SH
<i>ldt_create_client</i>			07/19/96			CL
<i>ldt_danProcessLongDAA</i>			07/19/96			SH
<i>ldt_danProcessShortDAA</i>			07/19/96			SH
<i>ldt_danRcvDAA</i>			07/19/96			SH
<i>ldt_db_CreateDANInfo</i>			07/26/96			CL
<i>ldt_db_CreateFileInfo</i>			07/26/96			CL
<i>ldt_db_CreateFileSetInfo</i>			07/26/96			CL
<i>ldt_db_GetDANInfo</i>			07/26/96			SH
<i>ldt_db_GetFileInfo</i>			07/26/96			SH
<i>ldt_db_GetFileGroupInfo</i>			07/26/96			SH
<i>ldt_db_GetLDTParm</i>			07/26/96			SH
<i>ldt_db_GetServerInfo</i>			07/19/96			CL
<i>ldt_db_InsFileSetInfo</i>			07/26/96			CL
<i>ldt_db_UpdSuspState</i>						
<i>ldt_db_UpdateDANInfo</i>			07/26/96			CL
<i>ldt_db_UpdateFileInfo</i>			08/02/96			SH
<i>ldt_db_UpdateFileSetInfo</i>			08/02/96			SH
<i>ldt_ddnAcceptClient</i>		06/28/96	06/28/96			SH
<i>ldt_ddnAuthentReq</i>			06/28/96			SH
<i>ldt_ddnCheckHostID</i>			06/28/96			SH
<i>ldt_ddnGenDDA</i>			06/28/96			SH
<i>ldt_ddnProcTermSig</i>			08/02/96			SH
<i>ldt_ddnProcessDDN</i>			08/02/96			SH
<i>ldt_ddnSendDDA</i>			08/02/96			SH
<i>ldt_ddnVerifyLongDDN</i>			08/02/96			SH
<i>ldt_ddnVerifyOriginator</i>			06/28/96			SH
<i>ldt_ddnVerifyShortDDN</i>			08/02/96			SH
<i>ldt_establish_client</i>			07/19/96			CL
<i>ldt_start_client_n_clock</i>			07/19/96			CL

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT	PGMR	DSGN
	SUB	CERT	CERT	TEST		
	SYS	DATE	DATE	TEST		
<i>lps_errno.h</i>	LPS		07/03/96	07/03/96	VT	
<i>lps_FIFOClose</i>		06/28/96	06/28/96	07/02/96	VT	SH
<i>lps_FIFOOpen</i>		06/28/96	06/28/96	07/02/96	VT	SH
<i>lps_FIFOReceive</i>		06/28/96	07/03/96	07/02/96	VT	SH
<i>lps_FIFOSend</i>		06/28/96	07/03/96	07/02/96	VT	VT
<i>lps_IPC.h</i>		06/28/96	07/03/96	07/02/96	VT	VT
<i>lps_List.h</i>			07/03/96	07/03/96	VT	
<i>lps_ListAddHead.c</i>			07/26/96			VT
<i>lps_ListAddTail.c</i>			07/03/96	07/03/96	XJ	
<i>lps_ListAllocList.c</i>			07/03/96	07/03/96	XJ	
<i>lps_ListErrno.c</i>			07/03/96	07/03/96	VT	
<i>lps_ListFreeList.c</i>			07/26/96			VT

LPS_Build_2_Units

<i>lps_ListNextNode.c</i>	07/26/96	VT
<i>lps_ListRemHead.c</i>	07/03/96	07/03/96 XJ
<i>lps_ListRemTail.c</i>	07/26/96	VT
<i>lps_MF_scene.h</i>		MR
<i>lps_RsrcAlloc</i>	06/28/96	06/28/96 07/02/96 VT
<i>lps_RsrcAllocFIFO</i>	06/28/96	06/28/96 07/02/96 VT
<i>lps_RsrcDealloc</i>	06/28/96	06/28/96 07/02/96 VT
<i>lps_ShmAddListTail.c</i>	08/30/96	VT
<i>lps_ShmAddrtoBlock.c</i>	08/30/96	VT
<i>lps_ShmBlocktoAddr.c</i>	08/30/96	VT
<i>lps_ShmCreate.c</i>	08/30/96	VT
<i>lps_ShmOpen.c</i>	08/30/96	VT
<i>lps_ShmRemListHead.c</i>	08/30/96	VT
<i>lps_ShmRemListTail.c</i>	08/30/96	VT
<i>lps_constants.h</i>	06/28/96	07/03/96 07/02/96 VT
<i>lps_db_GetSubIntvInfo</i>	08/02/96	VT
<i>lps_major_frame.h</i>		MR
<i>lps_scene_info.h</i>		MR

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT	PGMR DSGN	
	SUB	CERT	CERT	TEST		TEST
	SYS	DATE	DATE	PLANNED		ACTUAL
<i>mac_ExamLPSJournal.c</i>	MAC				HK	
<i>mac_FilterMsg.c</i>					HK	
<i>mac_MetaDataGen.c</i>					NP	
<i>mac_MetaDataGenFileHeadDesc.c</i>					NP	
<i>mac_MetaDataGenScene.c</i>					NP	
<i>mac_MetaDataGenSubIntv.c</i>					NP	
<i>mac_MetaDataWriteAScene.c</i>					NP	
<i>mac_MetaDataWriteSubIntv.c</i>					NP	
<i>mac_OpsMsg.c</i>					HK	
<i>mac_db_MetaDataGetAScene.pc</i>					NP	
<i>mac_db_MetaDataGetBandsPresent.pc</i>					NP	
<i>mac_db_MetaDataGetSubIntv.pc</i>					NP	
<i>mac_ui_MainMenu</i>					HK	
<i>mac_ui_MainShutdown</i>					HK	
<i>mac_ui_OpsMsg</i>					HK	
<i>mac_ui_StartCapture</i>					HK	
<i>mac_ui_StartLOR</i>					HK	
<i>mac_ui_StartStopDDNServer</i>					HK	
<i>mac_ui_StopCapture</i>					HK	
<i>mac_ui_StopLOR</i>					HK	

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT	PGMR DSGN	
	SUB	CERT	CERT	TEST		TEST
	SYS	DATE	DATE	PLANNED		ACTUAL
<i>mfp_AlignBands.c</i>	MFP				HV	
<i>mfp_CallLorExtract.c</i>		07/08/96			EL	
<i>mfp_CalWriteFile.c</i>		07/08/96			EL	
<i>mfp_ChckSplitMnf.c</i>		07/08/96			EL	
<i>mfp_CondenseDataGrp.c</i>	05/24/96		07/18/96		EL	
<i>mfp_Deint.c</i>		07/22/96			HV	
<i>mfp_ExtractMnf.c</i>		07/18/96			EL	
<i>mfp_FillBand6.c</i>		06/28/96			HV	
<i>mfp_FillMostBands.c</i>		06/28/96			HV	
<i>mfp_FindMfjEol.c</i>		07/26/96			HV	
<i>mfp_FindMjfSync.c</i>		07/15/96			LG	
<i>mfp_Main.c</i>		07/24/96			LG	
<i>mfp_MainBandGen.c</i>		07/22/96			HV	
<i>mfp_MainCleanup.c</i>		07/26/96			RT	
<i>mfp_MainFillMissMjfs.c</i>		07/22/96			HV	
<i>mfp_MainInit.c</i>		07/26/96			EL	
<i>mfp_MainPcdExtract.c</i>		07/05/96			LG	
<i>mfp_MainPcdStatusProc.c</i>		07/05/96			LG	
<i>mfp_MainQACalcScene.c</i>	07/15/96		07/19/96		EL LG	
<i>mfp_MainQASubGen.c</i>	07/05/96		07/19/96		RT LG	
<i>mfp_MainQAZeroScene.c</i>	07/08/96		07/19/96		RT LG	
<i>mfp_MainRelShmBlk.c</i>		07/18/96			EL	
<i>mfp_MainStatusExtract.c</i>		07/05/96			LG	
<i>mfp_MainVerifySpacecraftId.c</i>	05/24/96		07/08/96		EL	
<i>mfp_VerifyMjf.c</i>		07/15/96			LG	
<i>mfp_COMPAREeol.c</i>		07/26/96			HV	

LPS_Build_2_Units

mfp_db_InsertSceneQa.c

07/15/96

07/26/96

KC LG

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT		
	SUB	CERT	CERT	TEST	TEST	
	SYS	DATE	DATE	PLANNED	ACTUAL	PGMR DSGN
pcd_CalDate.c	PCD		04/19/96		XJ	
pcd_ComputeEpoch.c			04/19/96		XJ	
pcd_DayOfYear.c			04/19/96		XJ	
pcd_Defines.h					MW	
pcd_EpochBreakdown.c			04/19/96		XJ	
pcd_Externs.h					MW	
pcd_Globals.h					MW	
pcd_JulDate.c			04/19/96		XJ	
pcd_LagrangeInt.c			04/19/96		XJ	
pcd_Main.c					MW	
pcd_MainAcceptMinorFrames.c					CL	
pcd_MainAdjustTime.c			04/19/96		XJ	
pcd_MainAltitudeInt.c			04/19/96		XJ	
pcd_MainBuildCycle.c					CL	
pcd_MainBuildMajorFrames.c					CL	
pcd_MainBuildMinorFrames.c					CL	
pcd_MainCheckDataPoints.c					XJ	
pcd_MainCleanUp.c					MW	
pcd_MainComputeGHA.c			05/22/96		XJ	
pcd_MainComputeLat.c			05/22/96		XJ	
pcd_MainComputeLookPoint.c					XJ MW	
pcd_MainComputePosition.c					XJ	
pcd_MainComputeSceneCorners.c					XJ XJ	
pcd_MainConstructCycles.c						
pcd_MainCreatePcdFile.c					RM	
pcd_MainDetsceneDescription.c					XJ	
pcd_MainDetermineMissingWords.c					RS	
pcd_MainDeterminePcdWord.c					RS	
pcd_MainDetermineScenes.c					XJ	
pcd_MainEphemerisInt.c			04/19/96		XJ	
pcd_MainEstimateCycleTime.c						
pcd_MainEstimateMissingCycles.c						
pcd_MainEvalMnfQuality.c					RM	
pcd_MainExitHandler.c					MW MW	
pcd_MainExtractAds.c						
pcd_MainExtractAdsTemp.c						
pcd_MainExtractCycleInfo.c					RS	
pcd_MainExtractGyroData.c						
pcd_MainExtractGyroDriftData.c						
pcd_MainExtractMjfOneWord72.c					CL CL	
pcd_MainExtractMjfThreeWord72.c					CL CL	
pcd_MainExtractMjfTwoWord72.c					CL CL	
pcd_MainExtractMjfZeroWord72.c					CL CL	
pcd_MainExtractSceneParms.c					XJ	
pcd_MainExtractWord72.c					CL CL	
pcd_MainExtractWords.c					RS	
pcd_MainFillMajorFrame.c					RM	
pcd_MainFillMultiCycles.c					RS	
pcd_MainFillPcdCycle.c					RS	
pcd_MainFormatPcdCycle.c					RM	
pcd_MainFormatWords.c					RS	
pcd_MainGetNutAng.c			05/22/96		XJ	
pcd_MainInit.c					MW	
pcd_MainLocateSyncPatterns.c					RS	
pcd_MainPerformMajorityVote.c					RS	
pcd_MainProcMajorFrame.c					CL CL	
pcd_MainReportScenes.c					XJ	
pcd_MainUpdateSubIntv.c					RM	
pcd_MainUpdateSubIntvStats.c					RM	
pcd_MainVerifyCycle.c						
pcd_MainVerifyCycleTime.c						
pcd_MainWriteCycleToFile.c					RM	
pcd_MonthDay.c			04/19/96		XJ	

LPS Build 2 Units

UNIT	DESIGN	CODE	UNIT	UNIT		
	SUB	CERT	CERT	TEST	TEST	
	SYS	DATE	DATE	PLANNED	ACTUAL	PGMR DSGN

96/07/09
11:48:46

LPS_Build_2_Units

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<i>pcd_Protoypes.h</i>	<i>PCD</i>	<i>MW</i>
<i>pcd_Typedefs.h</i>		<i>MW</i>
<i>pcd_db_GetFirstWrssScene.pc</i>		<i>MW</i>
<i>pcd_db_GetNextWrssScene.pc</i>		<i>MW</i>
<i>pcd_db_ReportSceneInfo.pc</i>		<i>NP</i>
<i>pcd_db_StoreAcctInfo.pc</i>		<i>NP</i>
<i>pcd_db_StoreBandsPresent.pc</i>		<i>NP</i>

260 rows selected.



Issues/Concerns

- Schedule
 - Globals understaffed
 - PCDS staff not available at beginning of B2 means PDCS at risk to implement on time
 - S/W integration personnel diverted from B2 preparations by extended B1 integration
 - MFPS personnel must redesign B1 software, impacting B2 work
 - Documentation work will impact development



Issues/Concerns (continued)

- Design Questions
 - MFPS design decision
 - Current IDPS design requires significantly more memory
 - DSI count larger than anticipated



Issues/Concerns (continued)

- Other
 - PAO personnel do not have UNIX access to status/SEN database
 - Reverse engineering tool and procedures not in place